

# **GIS Specialist**

Position Title:	GIS Specialist	Office Location:	Flexible
Status:	Full Time, Salary, Non -exempt	Hiring Salary:	\$50,000
Supervisor:	Trail & Lands Conservation Manager	Start Date:	March 1, 2023

The mission of the Continental Divide Trail Coalition is to complete, promote, and protect the Continental Divide National Scenic Trail. The CDTC will do this by building a strong and diverse trail community, providing up-to-date information to the public, and encouraging conservation and stewardship of the trail, its corridor, and surrounding landscapes.

### **POSITION SUMMARY**

The GIS Specialist creates and manages detailed spatial information about the CDT and surroundings, performs spatial analysis, and creates accurate cartographic products for internal, federal and public use. The GIS Specialist is responsible for the development of the State of the Trail Report (SOTT), a document serving as the repository of institutional knowledge about the CDT to be used by CDTC and federal land management partners to inform management decisions. The GIS Specialist also works in partnership with other CDTC programs to apply spatial data and production capabilities in the everyday needs of the organization. It is the goal of the GIS Specialist to act as the authoritative source for CDT spatial data and to leverage spatial information to streamline CDTC operations as the organization works towards its management and trail completion goals.

#### **ESSENTIAL DUTIES AND RESPONSIBILITIES**

- **DATA MANAGEMENT**: Maintain and manage CDTC's GIS products by working with the Executive Director, federal land management partners, and other CDTC programs. Expectations are to assist in the implementation of a strategic approach to address program needs as follows:
  - Coordinating with federal land management partners, collect and compile centerline data and maintain authoritative CDT centerline dataset.
  - Share authoritative CDT centerline data with public in multiple formats (shapefile, KML/KMZ, GPX, etc.).
  - Develop data standards and best practices for centerline and other CDT associated data collection, including but not limited to GPS data collection and data sharing with federal land management and other partners.
  - Compile and manage other CDT-related data (e.g., trailheads and water sources) according to data standards. Maintain inventory of GIS data for use by other CDTC staff with GIS skills.
  - $\circ$   $\,$  Maintain ArcGIS Online data and maps for use by all CDTC staff  $\,$
  - Perform spatial data queries and analysis.
  - Provide timely support pertaining to CDTC data and cartographic services to partners and the general public.
  - Assist with eTRACS trail condition surveys and data management.
  - Assist CDTC program staff and USFS staff to update project tracking tool.

- **TRAIL MANAGEMENT AND COMPLETION**: Complete and maintain CDT State of the Trail Report (SOTT).
  - Analyze most current CDT and agency data to update reports on trail mileage by state, land manager, trail type etc.
  - Update CDTC and partner trail projects by year and by field unit.
  - Identify future opportunities for trail protection, such as potential/existing access issues, user conflicts (motorized use), trail improvements, and side/connector trails and trailheads making up CDT Trail Network.
  - Produce and update SOTT maps to a high cartographic standard.
- **VISUAL INFORMATION**: Ensure that publicly available trail information is accurate and available to the public, in coordination with Outreach, Trail Information, and Communications programs.
  - Maintain and update <u>CDT Interactive Map</u>, including the trail alerts and notifications pages on CDTC Website and social media channels.
  - Produce updated versions of the CDT Map Set (static maps for print or digital use) on an annual basis, or as necessitated by changes in trail alignment and trail information data.
  - Support work with design contractors to produce large-scale outreach materials such as trailhead and town center kiosks to a high cartographic and visual standard in collaboration with other CDTC staff, federal land management partners, and Gateway Community residents.
  - Work with Community and Outreach Specialist to develop spatial materials for newly designated Gateway Communities, such as local CDT Access Maps, to a high cartographic standard.
  - Add to creative thinking around new ways to share, disperse and otherwise provide trail data and information. Develop new web mapping resources, as time allows.
  - Develop public information material such as updates and reports for Congress, website, guidebooks, brochures, etc.
- **CDTC PROGRAM SUPPORT**: Work with other CDTC program managers to support their program areas with spatially informed data and materials.
  - Work with Trail Policy Manager to perform spatial data queries and analysis as well as high quality cartographic representations of findings for submission with comments to Forest Plans (USFS), Resource Management Plans (BLM), Scoping Comments (NEPA) and similar opportunities.
  - Prepare project area maps for submission with grants.
  - Prepare presentation and proposal quality maps in a timely manner as per requests from the Executive Director and other CDTC program areas.
  - Work with Trail and Lands Conservation Program manager to perform research and analysis pertaining to landscape and regional scale conservation issues of the CDT.
  - Inventory of the CDT and its corridor to identify impacts from external threats and development along the corridor.
  - Collaborate with other programs to develop spatial products to convey CDTC's work to the public, land managers, and policy makers
- Performs other related duties as assigned and required.



## **APPLICANT QUALIFICATIONS & PREFERRED SKILLS**

## EDUCATION

Completed a degree at Associates level or higher, or show equivalent experience. Relevant areas of study include Geography, Environmental Studies/Science, Planning, Recreation Management, or Landscape Architecture. However, any course of study with demonstrated critical or creative work in GIS and mapping is welcome. Advanced degrees and professional experience will be considered favorably.

## QUALIFICATIONS

- 3-5 years professional GIS experience.
- Demonstrated spatial analysis skills.
- Demonstrated cartographic design skills.
- Proficient in ESRI ArcGIS products specifically ArcGIS Pro and ArcGIS Online.
- Proficient in Adobe InDesign, Illustrator, and Photoshop.
- Proficient with Microsoft Office and Google Suite software
- Ability to conduct work in person and remotely via video conferencing, email, and phone.
- Strong oral and written communication skills. Ability to convey ideas verbally, written, and spatially
- Experience creating web maps and web products with ArcGIS Pro, MapBox Studio, ESRI Story Maps, and other applications such as CalTopo.
- Self-directed, organized, detail oriented and flexible. Able to work independently for extended stretches of time. Good interpersonal skills, team-oriented, enjoys collaboration and working with others. Ability to prioritize and work on multiple projects simultaneously. Anticipate, understand, and respond to the needs of CDTC staff and partners.
- A demonstrated understanding of and commitment to the importance of Justice, Equity, Diversity, and Inclusion in the outdoor space and the ability to effectively work on diver teams or with a diverse range of people.

### DESIRED/PREFERRED SKILLS

- Knowledge of land use practices and management in the Rocky Mountain West.
- Experience working with federal land management agencies.
- Experience with environmental planning and land management processes such as NEPA
- Experience collecting and processing GPS data.
- Experience with remote sensing analysis and interpretation
- Enterprise spatial database management skills in SQL.
- Experience customizing web applications with Javascript, HTML, and CSS.
- Experience scripting/programming in Python (ArcPy)
- Familiarity with web development and Wordpress administration.
- Field work experience collecting data and conducting surveys using GPS technologies in backcountry and front country settings
- Familiarity with the Continental Divide Trail
- Outdoor skills such as first aid training helpful, backpacking, camping, orienteering, logistics in remote settings, hiking over rough terrain for extended periods of time, Leave No Trace principles, and driving 4x4 vehicle. Experience with trail design, construction, and planning



#### PHYSICAL DEMANDS

- Travel and weekend work may be extensive at times.
- Travel by car for long distances at times
- Ability to communicate with individuals by phone, email and in person.
- May require the ability to lift or move light to moderate weight.
- May require the ability to hike significant distances carrying a pack weighing up to 50lbs
- May require the ability to work under adverse weather conditions.
- Sitting or standing for long periods of time in an office setting
- Working at and viewing computer monitors for long periods of time

#### WORK ENVIRONMENT

- This position will mostly be located in an office setting but field work, may be required (see physical demands)
- Location for this position is flexible with office space in the CDTC Golden, CO office, and remote working situations available in CDT states (NM, CO, WY, ID, MT)
- Field work may be conducted in remote wilderness conditions, varied weather conditions, and exposure to various pests (ticks) and wildlife.

Moderate noise level due to open office environment with a high level of activity on the phone, computers, and printers.

#### BENEFITS

CDTC also provides benefits including company sponsored health insurance, cell phone reimbursement, 403(b) retirement plan contributions, and a generous time off policy.

### TO APPLY

Interested individuals should send a cover letter, resume and three references to <u>sshattuck@continentaldividetrail.org</u> with subject line "CDT GIS Specialist Application". The application deadline is February 5, 2023.

#### **EOE Statement:**

CDTC provides equal employment opportunities (EEO) to all employees and applicants for employment without regard to race, color, religion, sex, national origin, age, disability, genetics, or other protected status. For information about CDTC, please visit our website at www.continentaldividetrail.org.